

## Demographic and Socio Economic Characteristics of Disabled Persons at Rajshahi City in Bangladesh

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### ABSTRACT

This study aimed to represent the situation of disabled persons, and the attitude of family and society towards disabled persons. This study also examined the factors associated with disabilities. Data for this study were collected by direct and indirect interview method from disabled persons at Rajshahi city in Bangladesh. A total of 150 cases were interviewed. Data were analyzed using both univariate and multivariate statistical techniques. In this study, 60% respondents were male and 40% respondents were female. Out of the total respondents 34% were student and 40.7% were housewife. Monthly income and expenditure of most of the disabled persons' family was very poor. This study indicated that disability occurred because of the accident, lack of nutrition, mental pressure, and same blood group of spouses. Majority of the disabled person and their family expect special facilities from the government, such as co-education, transport and service facilities for the disabled persons. Multivariate analysis showed that age, occupation, causes of disability, parents' education, monthly expenditure for disabled persons, and knowledge about government facilities are contributing factors to disability. Furthermore, knowledge about government facilities, occupation, religion, causes of disability, monthly expenditure for disabled persons are contributing factors to the use of government facilities. This study indicates that increasing awareness in the family and society, especially the cordial behavior with the disabled persons is expected to improve the situation of disability in the country.

**Keywords:** Disabled; Social behavior; Knowledge; Awareness; Government facilities; Causes; Treatments; Neighbor attitude; Rights of disabled; Logistic regression; Bangladesh.

### 1. Introduction

Persons with disabilities constitute the most marginalized group in the Asia and Pacific region. A disability is any physical or mental condition that makes it more difficult for the person with the condition to do certain activities and interact with the world around them (CDC, 2020). The United Nations census recommendations state a person with disability is defined as a person who is limited in the kind or amount of activities that he or she can do because of ongoing difficulties due to a long-term physical condition, mental condition or health problem (World Bank, 2003). Children and young people with disabilities face substantial barrier to the participation in education and skill development programs. Most disabled persons are poor, but few poverty reduction programs include them in the program (ESCAP, 1998).

In Beijing Conference, 1992, guidelines were drawn up in an Agenda for Action for achieving the goals of the Asia and Pacific Decade of Disabled Persons within 12 policy areas: national coordination, legislation, information, public awareness, accessibility and communication, education, training and employment, prevention of causes of disability, rehabilitation services, assistive devices, self-help organizations and regional cooperation. These guidelines became a very useful tool for the governments in Asia and Pacific region in formulating policies and their implementations for improving the situation of disabled persons in this region.

Although the achievements were uneven, governments in Asia and Pacific region recognized an overall improvement in all the twelve policy categories included in the Agenda for Action. There were significant achievements in the areas of national coordination and legislation. Some improvement was also observed in preventing the causes of disability, rehabilitation services and developing self-help organizations for disabled persons. But there persisted an alarmingly low access rate to education for children and youth with disabilities, and

a marked sub regional disparity in the implementation of the Agenda for Action (JICA, 2000). Based on the assessment of the situation of disabled persons in the region at the end of the Asian and Pacific Decade (1993–2002), governments proclaimed the extension of the Asian and Pacific Decade of Disabled Persons, for the next decade (2003-2012) (World Bank, 2003).

Significant global, regional, national and sub national efforts were observed to make for addressing the issues of disabled persons since the adopting the Asian and Pacific Decade policies in 1993. Despite these efforts, the situation of disabled people has not improved in the expected way in Asia and Pacific and East Asia and Pacific regions. One issue that has not been explicitly addressed by the policy of the decade is the amount of resources to be mobilized towards the implementation of policies and programs by national governments as well as international development agencies to meet the needs of disabled persons during the planned period.

The World Bank has recognized disability issues as an important development issue and recently announced the inclusion of disability issues into its work. According to an estimate of WHO, one out of ten persons have some type of disability, and in the Asian and Pacific region there are 400 million persons with disabilities, comprising two thirds of the world disabled population. Among them, 80% are estimated to live in the rural areas of developing countries of the region.

Bangladesh is one of the developing countries where 80% people living below poverty, according to World Health Organization (WHO), about 10% people in the country are disabled. Disabled people, especially disabled women and girls, are almost invariably among the poorest; most oppressed and excluded members of the society. One of the main problems faced by disabled people is the negative attitude of the society to them. Negative attitudes, environmental and institutional barriers have made them vulnerable and neglected class of the society (ESCAP, 1999).

In rural Bangladesh persons with disabilities (PWDs) are not call by their name, furthermore many superstition and negative attitude made the life of disabled people tremendously painful. Many people in the Bangladesh view disability as a curse and a cause of embarrassment to the family. In Bangladesh, there have been only a few systemic interventions to raise awareness of persons with disabilities at the community level<sup>1</sup>. Women with disabilities are particularly vulnerable to social discrimination and neglect. The PWDs are usually excluded from existing governmental and non-governmental development programmers. From family to state everywhere disabled children and adults are excluded from their social, political, and economic rights. Furthermore, disabled adults and children are often excluded from development work. Society have been seen their problem primarily from the medical or welfare perspective. In fact, their needs and priorities are not addressed same as those of other members of their communities. In this connection, therefore, in this study attempt has been made to presents the situation, family and social behavior towards the disable persons and also identify the factors that are related with disabilities.

### **1.1. Objectives of the Study**

The specific objectives of the study are as follows:

(1) To examine the social, family behavior and socioeconomic condition toward the disable persons;

- (2) To observe the effect of parent's education and occupation on disable persons;
- (3) Identify the factors that affect on disability and non-Government facilities for disable persons.

## 2. Methods and Materials

### 2.1. Settings and Study Design

The study was conducted in Rajshahi City Corporation which was renowned as the clean city, green city and education City Corporation. We randomly selected two specialized school for disables located in Panchaboti (Kolponarai Buddhi Protibondhi School) and Sosthitola (Sarkari Bak-Shrobon Protibondhi School) and an association named Association of Disable Development (ADD), at the heart of the city corporation. These institutions are well known for the education, training and provide opportunity to work (ADD) for the disabled persons. This study is cross-sectional in nature.

### 2.2. Tools and Data collection

We had interviewed the disable persons they are involved of the selected institutes by using semi-structured questionnaire. The data was collected both directly from the disable persons, who were able to understand the questionnaire and provide the feedbacks and responses; and indirectly from parents or respective guardians including the mentors of the respective institute. We developed questionnaire considering the lowest level of understandings of the disable persons for collecting their feedbacks. The whole questionnaire was patronized into four different parts form the four different aspects. For example, household questionnaire, that was used to identify the disable persons based on this study participants eligibility. Eligible disables were further asked about their socio-demographic characteristics, disability related items, community perception related questionnaire and supported facility-based questionnaire. The data was collected by the under-graduate student under his/her project criteria. They were well trained for the data collection system, especially for the disable persons and children. The duration of the data collection was one month in 2014 (February-March).

### 2.3. Variable of Interest and Computerization

Before performing statistical analysis, variables are described into two groups, (1) Dependent variables and (2) Independent variables. The dependent variable are used have disability in family (If yes=1; no=0) and have got government facilities (if yes=1; no=0). The independent variables included are socio-demographic and government and non-government facilities for disability related knowledge information such as age, occupation, religion, causes of disability, causes of disability time at birth, parent's education, and monthly expenditure for disability, attitude of society and neighbors towards disability, knows regarding government and non-government facilities for disable persons etc.

In this study, univariate and bivariate statistical technique has been used to understand and differentials of background characteristics of the respondents. Besides the descriptive statistics, multivariate analytical techniques (simply binary logistic regression) has been used to investigate the determinants of disability and government facilities regarding disability. The statistical analysis has been performed by computer statistical package for social science (SPSS) for 16.0 windows version.

### 3. Findings and Discussion

#### 3.1. Results from Univariate and Bivariate Analysis

##### 3.1.1. Socio-Demographic Characteristics

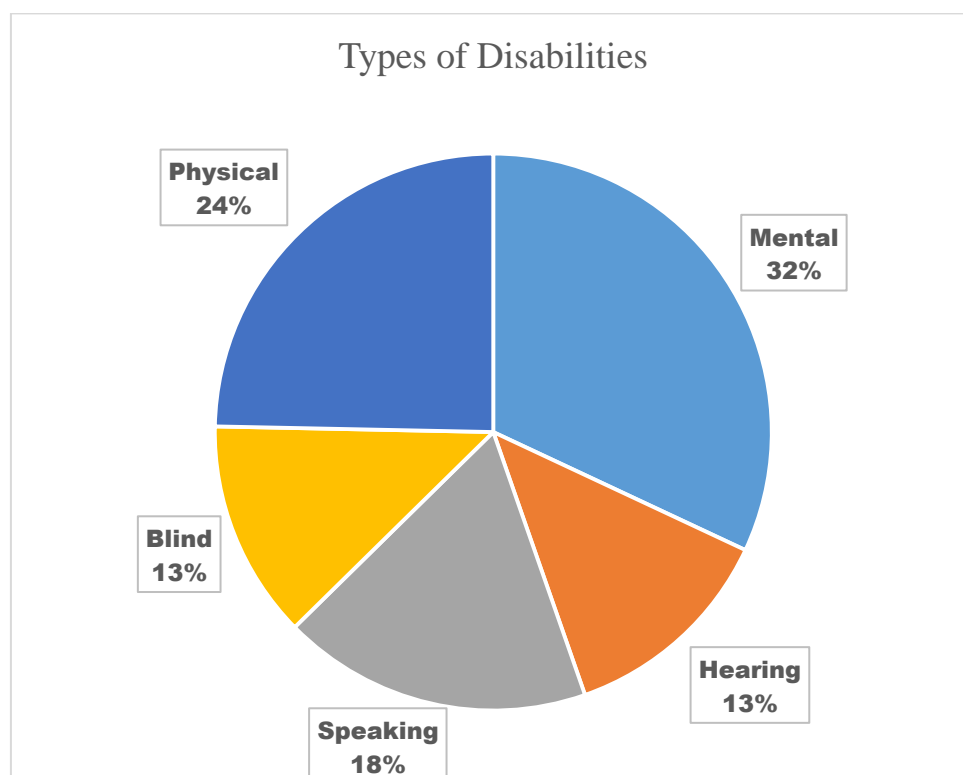
It is observed from table 1 that among 150 respondents most of them were male (60%) and 40% female, middle aged 25 years and above are 52.7% and 95.3% were born in Muslim family. Most of the respondents 43% involved in different occupation (Business, labour, unemployed etc.), student 34%, self- dependency 10%, service 8% and teacher only 4.7%. Monthly family income and expenditure less than 15,000 Bangladeshi taka of 32% and 68% of the respondents respectively. Around 63% respondents were from nuclear family and 37% joint family, among them born at home 67%, remaining others 33% in hospital or clinic. From the same table found that 25.3% parents were illiterate, 26% were under S.S.C level, 10% were S.S.C level, 14.7% were H.S.C level and 24% were others (degree and above) level of education. As expected 96% disable's family feel mental problems and only 4% didn't feel mental problem for disable person's in the family. It is reveal that 58.7% respondent's family behaves normally with them, but 38% respondents are ignored by family members and 2% respondents are given mental tortured by family members and 1.3% respondents suffers other types of attitude. Regarding the attitudes of societal and neighbors behaving 81.3% were affection, 12% were mental torture, 6.7% were other types behavior. Out of 150 respondents, 60% gets proper treatment, 10% gets proper nutrition, 7.3% gets hormone treatment and 22.7% gets other treatments. The results from bivariate analysis (Table 3) reveal that occupation, parent's educational level, causes of disability, attitudes of family member, monthly income, and monthly expenditure has statistical significant association with disability.

**Table 1. Socio-Demographic Characteristics of the Respondents**

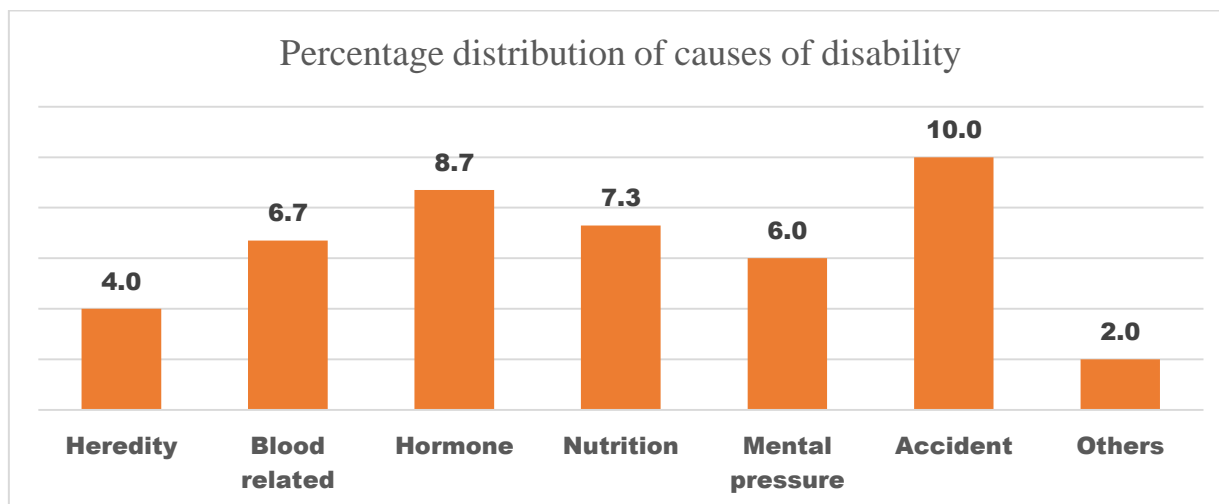
Variable Name	Frequency	Percent
<b>Sex</b>		
Male	90	60.0
Female	60	40.0
<b>Age</b>		
<20 years	42	28.0
21-24 years	29	19.3
25+ years	79	52.7
<b>Religion</b>		
Islam	143	95.3
Hindu	7	4.7
<b>Occupation</b>		
Teacher	7	4.7

Service	12	8.0
Self -dependency	15	10.0
Student	51	34.0
Others (Business, labour, unemployed)	65	43.0
<b>Parent's Education</b>		
Illiterate	38	25.3
Under S.S.C	39	26.0
S.S.C	15	10.0
H.S.C	22	14.7
Others	36	24.0
<b>Monthly Family Income</b>		
1000-3000	35	23.3
3001-6000	40	26.7
6001-15000	48	32.0
15001-20000	10	6.7
20001+	17	11.3
<b>Monthly Family Expenditure</b>		
1000-3000	24	16.0
3001-6000	55	36.7
6001-15000	47	31.3
15001-20000	8	5.3
20001+	16	10.7
<b>Types of Family</b>		
Joint	55	36.7
Nuclear	95	63.3
<b>Place at Birth</b>		
Home	100	66.7
Hospital	32	21.4
Clinic	15	10.0
Others	3	2.0
None	62	41.4

Feel Mental problem for Disability in Family		
Yes	144	96.0
No	6	4.0
Attitudes of Family		
Normal	88	58.7
Ignore	57	38.0
Mental torture	3	2.0
Others	2	1.3
Attitudes of Societal and Neighbor		
Affection	122	81.3
Torture	18	12.0
Others	10	6.7
Treatment		
Proper medicinal treatment	90	60.0
Proper nutrition	15	10.0
Hormone treatment	11	7.3
Others	34	22.7



**Figure 1.** Percentage Distribution of Different Types of Disabilities



**Figure 2.** Distribution of disabilities among the sample population (n=150)

Respondents were mostly disabled mentally (32%) followed by the physical disabilities (24%), speaking problem (18%), problem in eye-sight/blind and deaf/hearing problem (13%). Several causes were identified by the respondents for their disability such as- heredity (4%), spouse blood related (6.7%), hormone related (8.7%), nutritional deficiency (7.3%), mental pressure (6%), accidental causes 10%, and 2% causes were not defined (see figure 1 and 2).

### 3.1.2. Government and Non-Government Facilities Related Characteristics

It is observed from table (table 2) that 88.7% respondents know about the government facilities but only 30.1% got government facilities, 97.3% reported that should have government allowance, 97.3% should have co-education, 96.7% should have transported facilities, 93.4% should have service facilities, 90.7% thought about the need for rehabilitation for disabled persons. Among them 83.3% know about institute for keeping rights them. Around 60% expect economical, 27.3% expect vocational and 10% expect unique allowance help to the government. 25% disabled persons reported that they faced obstacles to get the government facilities.

**Table 2.** Government and Non-Government Facilities and Expectations

Variable name	Frequency	Percent
<b>Knows Government Facilities</b>		
Yes	133	88.7
No	17	11.3
<b>Got Government Facilities</b>		
Yes	45	30.1
No	105	69.9
<b>Should Government Allowance</b>		
Yes	146	97.3
No	4	2.7

<b>Should Co Education for Disability</b>		
Yes	146	97.3
No	4	2.7
<b>Should Transported Facilities</b>		
Yes	145	96.7
No	5	3.3
<b>Should Service Facilities</b>		
Yes	140	93.4
No	10	6.6
<b>Should Rehabilitation for Disability</b>		
Yes	136	90.7
No	14	9.3
<b>Knows Rights about Disability</b>		
Yes	125	83.3
No	25	16.7
<b>Expectation of Government Help</b>		
Economically	90	60.0
Vocationally	41	27.3
Unique Allowance	15	10.0
Others	4	2.7
<b>Obstacles of Government Facilities</b>		
Yes	37	24.7
No	113	75.3

**Table 3.** Bivariate and Contingency Analysis for Has a Disability and Several Independent Variables

Characteristics	Have a Disabilities in family?		Chi-Square test results
	Yes	No	
<b>Age</b>			$\chi^2_{cal}=3.297$ p=0.509
<20 years	35(37.6%)	7(9.2%)	
21-25	20(22.6%)	9(6.4%)	
26 and above	62(61.6%)	17(17.4%)	



<b>Occupation</b>			
Teacher and Services and Self-dependency	29(26.6%)	5(7.1%)	$\chi^2_{\text{cal}}=35.276$ p=0.000
Student	26(39.8%)	25(11.2%)	
Business and Others	62(50.7%)	5(13.9%)	
<b>Monthly Income</b>			
1000- 6000	66(58.5%)	9(16.5%)	$\chi^2_{\text{cal}}=15.382$ p=0.004
6001-15000	32(37.4%)	16(10.6%)	
15001 and above	19(21.1%)	8(5.9%)	
<b>Monthly Expenditure</b>			
1000- 6000	69(61.6%)	10(17.4%)	$\chi^2_{\text{cal}}=11.898$ p=0.018
6001-15000	32(36.7%)	26(10.3%)	
15001 and above	16(18.7%)	8(5.3%)	
<b>Attitude of Family Member</b>			
Normal and Others	81(70.2%)	9(19.8%)	$\chi^2_{\text{cal}}=23.733$ p=0.000
Ignore and Mental torture	36(46.7%)	24(12.5%)	
<b>Parents Education</b>			
Illiterate	9(11.4%)	29(26.6%)	$\chi^2_{\text{cal}}=15.423$ p=0.219
Under S.S.C	10(11.7%)	29(27.3%)	
S.S.C	4(4.5%)	10(10.5%)	
H.S.C	8(6.6%)	14(15.4%)	
Others	14(10.8%)	22(25.2%)	
<b>Societal and Neighbor Attitudes</b>			
Affection	31(35.8%)	89(84.6%)	$\chi^2_{\text{cal}}=6.566$ p=0.682
Torture and Others	7(3.8%)	6(9.0%)	
Elements of entertainment	6(4.4%)	9(10.4%)	
<b>Obstacle of Government Facilities</b>			
Yes	23(11.1%)	24(34.3%)	$\chi^2_{\text{cal}}=103.382$ p=0.000
No	12(24.3%)	91(78.3%)	

It is observed (table 4) that for the case of government facilities age, occupation, home types, attitudes of family member, wants to government service has a significant association with government facilities. It is remarkable that

most of the government facilities related variables are significantly associated for both the dependent variables- disability and government facilities.

**Table 4.** Bivariate and Contingency Analysis for Got Government Facilities and Several Independent Variables

Characteristics	Got Government Facilities		Chi-Square Test Results
	Yes	No	
<b>Age</b>			
<20 years	10(12.6%)	31(29.4%)	$\chi^2_{\text{cal}}=19.337$
21-25	15(8.7%)	15(20.3%)	d.f=12, p=0.081
26 and above	20(23.7%)	59(55.3%)	$\chi^2_{\text{tab}}=18.55$
<b>Occupation</b>			
Teacher and Services and Self-dependency	16(10.2%)	18(23.8%)	$\chi^2_{\text{cal}}=35.215$
Student	22(15.3%)	29(35.7%)	d.f=15, p=0.002
Business and Others	6(19.5%)	59(45.5%)	$\chi^2_{\text{tab}}=25$
<b>Monthly income</b>			
1000- 6000	16(22.0%)	57(52.0%)	$\chi^2_{\text{cal}}=14.32$
6001-15000	15(14.1%)	33(33.3%)	d.f=12, p=0.256
15001 and above	13(7.3%)	14(18.7%)	$\chi^2_{\text{tab}}=18.55$
<b>Monthly expenditure</b>			
1000- 6000	17(23.1%)	60(54.7%)	$\chi^2_{\text{cal}}=16.819$
6001-15000	14(13.8%)	33(32.6%)	d.f=12, p=0.157
15001 and above	13(7.0%)	11(22.3%)	$\chi^2_{\text{tab}}=18.55$
<b>Home type</b>			
Clay made	5(6.0%)	16(14.0%)	$\chi^2_{\text{cal}}=12.558$
Bricks made	28(22.5%)	47(52.5%)	d.f=6, p=0.051
Clay bricks made	12(16.5%)	42(38.5%)	$\chi^2_{\text{tab}}=12.59$
<b>Cause of Disability at the time of birth</b>			
Unskilled nurse and Doctor nurse ignorance	10(9.7%)	23(22.9%)	
Family member ignorance	11(7.3%)	14(17.3%)	$\chi^2_{\text{cal}}=15.968$
Physical torture	11(7.6%)	14(18.0%)	d.f=12, p=0.193
Others	12(19.4%)	53(45.8%)	$\chi^2_{\text{tab}}=18.55$

<b>Attitude of Family member</b>			
Normal and Others	25(26.8%)	19(17.6%)	$\chi^2_{cal}=23.733$
Ignore nd Mental torture	65(62.4%)	39(41.6%)	d.f=3, p=0.000 $\chi^2_{tab}=7.81$
<b>Parents Education</b>			
Illiterate	9(11.4%)	29(26.6%)	$\chi^2_{cal}=15.423$
Under S.S.C	10(11.7%)	29(27.3%)	d.f=12, p=0.219
S.S.C	4(4.5%)	10(10.5%)	$\chi^2_{tab}=18.55$
H.S.C	8(6.6%)	14(15.4%)	
Others	14(10.8%)	22(25.2%)	
<b>Types of Disability</b>			
Mental	11(14.1%)	37(33.3%)	$\chi^2_{cal}=81.546$
Speaking	11(7.9%)	16(18.7%)	d.f=15, p=0.000 $\chi^2_{tab}=25.00$
Hearing	7(5.6%)	12(13.2%)	
Blind and Physical	15(15.9%)	38(37.5%)	
<b>Societal and Neighbor Attitudes</b>			
Affection	31(35.8%)	89(84.6%)	$\chi^2_{cal}=6.566$
Torture and Others	7(3.8%)	6(9.0%)	d.f=9,p=0.682
Elements of entertainment	6(4.4%)	9(10.4%)	$\chi^2_{tab}=16.92$
<b>Disable Persons Face Obstacle of Government Facilities</b>			
Yes	23(11.1%)	24(34.3%)	$\chi^2_{cal}=103.382$
No	12(24.3%)	91(78.3%)	d.f=6, p=0.000 $\chi^2_{tab}=12.59$
<b>Knows Government Facilities</b>			
Yes	36(39.9%)	9(5.1%)	$\chi^2_{cal}=13.787$
No	97(93.1%)	8(11.9%)	d.f=3, p=0.003 $\chi^2_{tab}=7.81$
<b>Disabilities Should Have Service Facilities</b>			
Yes	38(41.9%)	7(3.0%)	$\chi^2_{cal}=11.204$
No	102(97.9%)	5(7.0%)	d.f=6, p=0.082 $\chi^2_{tab}=12.59$

### 3.2. Results from Multivariate Analysis

To identify the influential factors for disability and government facilities for disable person's logistic regression has been employed and the results are presented in table 5 and 6 respectively.

**Table 5.** Determinants of Disability: Logistic Regression Estimate of Co-efficient and Odd Ratio

Characteristics		Coefficient ( $\beta$ )	Standard Error of ( $\beta$ )	Odd Ratio Exp ( $\beta$ )
<b>Age</b>				
	4-10 <sup>R</sup>	-	-	1.00
	11-15	0.881 ***	0.544	2.413
	16-20	-0.005	0.218	0.995
	21-24	0.009	0.122	1.009
	25+	0.085	0.077	1.089
<b>Religion</b>				
	(Buddhist, Christen) <sup>R</sup>	-	-	1.00
	Islam	-0.701	2.524	0.496
	Hindu	-5.826	4.577	0.003
<b>Causes of Disability</b>				
	None at all <sup>R</sup>	-	-	1.00
	Heredity	6.876 ***	3.844	8.642
	Blood group	9.464 **	4.212	17.768
	Hormone related	8.289 **	3.493	11.403
	Lack of Nutrition During Pregnancy	1.660	7.987	20.421
	Mental pressure During Pregnancy	7.794 **	3.594	5.325
	Above all	4.976 ***	2.692	8.642
<b>Parents Education</b>				
	(B.S.C. Honors, M.S.C.) <sup>R</sup>	-	-	1.00
	Illiterate	1.074	1.947	2.926
	Under S. S. C	1.152	2.010	3.164
	S.S.C	3.620 ***	2.144	37.320

	H.S.C	6.862 *	2.642	955.753
<b>Monthly Expenditure for Disability</b>				
	2500+ <sup>R</sup>	-	-	1.00
	200-500	2.534 **	1.095	12.607
	501-1000	0.501 **	0.240	1.651
	1001-1500	0.654 ***	0.376	1.922
	1501-2500	0.322 **	0.165	1.380
<b>Knows Regarding Govt. Facilities</b>				
	No <sup>R</sup>	-	-	1.00
	Yes	2.592 ***	1.607	13.352
<b>NiekerkR<sup>2</sup> = 0.750</b>				

**Notes:** R = Reference Category; \*, \*\*, \*\*\* indicate  $p < 0.01$ ,  $p < 0.05$ ,  $p < 0.10$  level of significance.

It is observed from table 5 as expected that respondent's age, causes of disability, monthly family expenditure and knowledge of government facilities were significant risk factor of the disability. From the analysis, respondent's age between 11-15 years was 2.4 times more likely to the risk of disability than whose age 4-10 years. Compared to no causes, heredity, spouse blood group, hormone related causes, mental pressure during pregnancy and all causes significantly increased the odds of disability by 8.6, 17.8, 11.4, 5.3 and 8.6 times, respectively. Respondent who has passed S.S.C and H.S.C are 37.3 and 955.7 times more likely to risk with disability than higher educated persons (degree and above). The result of regression co-efficient expenditure for disability 200-500, 501-1000, 1001-1500 and 1501-2500 had 12.67, 1.651, 1.922- and 1.380-times higher odds of disability than highest expenditure for disability. Lastly, the respondents know government facilities were 13.4 times higher odds of disability than who didn't know government facilities.

**Table 6.** Determinants of Got Government Facilities of Disable Persons: Logistic Regression  
Estimate of Co-efficient and Odd Ratio

Characteristics		Coefficient ( $\beta$ )	Standard Error of ( $\beta$ )	Odd Ratio Exp ( $\beta$ )
<b>Occupation</b>				
	(Labors, Housewife, unemployed) <sup>R</sup>	-	-	1.00
	Teacher	-3.212 **	1.235	0.040
	Service	-1.910 **	0.950	0.148
	Self-Employee	-3.166 *	0.942	0.042
	Student	-1.939 *	0.757	0.144

Religion				
	(Buddhist, Christen) <sup>R</sup>	-	-	1.00
	Islam	-0.079 ***	1.419	0.924
	Hindu	-.0304	2.036	0.738
Cause of Disability Time at Birth				
	(Above all, None at all) <sup>R</sup>	-	-	1.00
	Unskilled Nurse	-1.288 ***	0.723	.276
	Ignorance of Doctor or Nurse	1.147	1.610	3.148
	Unconsciousness of family Members	-0.289	0.754	0.749
	Physical Touchier	-0.727	0.722	0.483
Monthly Expenditure for Disability				
	2500+ <sup>R</sup>	-	-	1.00
	200-500	1.519 **	0.734	4.568
	501-1000	0.677 *	0.242	1.968
	1001-1500	0.206	0.264	1.229
	1501-2500	0.074	0.144	1.077
Attitude of Society and Neighbors Towards Disability				
	(Naturally, not at all) <sup>R</sup>	-	-	1.00
	Affection	1.610 ***	0.969	5.003
	Torture	2.760	2.123	15.803
	Elements of Entertainments	0.877	1.061	2.404
Knows Regarding Govt. Facilities				
	No <sup>R</sup>	-	-	1.00
	Yes	0.234	0.799	1.263
<b>NiekerkR<sup>2</sup> = 0.611</b>				

**Notes:** R = Reference Category; \*, \*\*, \*\*\* indicate  $p < 0.01$ ,  $p < 0.05$ ,  $p < 0.10$  level of significance respectively.

Again from table 6 reveal that teachers, service-men, self-employed persons and students had lower odds than labour, housewife and unemployed. It is indicate that, for teachers, self-employed persons and students significantly had 96%, 85%, and 84% less likely to get Government facilities than others (Labors, housewife and unemployed). Those who reported to be disable due to unskilled nurses at the time of birth had 28% are less likely to get government facilities than their counter part whereas unconsciousness of family members had lowered the odds by 25%. On the other hand, those who spent 200-500 per month for their disability had 4.6 times higher

chance to get the government facilities ( $p < 0.001$ ), whereas, those who spent 500-1000 had around 2 times higher odds ( $p < 0.001$ ) than those who spent more than 2500 Bangladeshi Taka. Neighbors and society's affectionate attitudes to the disabled enable more than 5 times to get the government facilities. One exception is made in the case of respondents who know regarding government facilities, the results showed not statistically significant with got government facilities.

### 3.3. Discussion

Findings from this study indicate that most of the respondents were male, maximum respondent's age above 25 years and 95% belongs to Muslim religion. Majority of the respondents are laborers, housewife and unemployed. Most of the respondent's monthly income is lowest which major causes of disability are mental torture. Disability occurs time at birth, also they believe that disability may occur by accident, lack of nutrition, mental pressure and marriage by same blood group. Majority of respondents want to Government facilities, like Government allowance, Co-education system, transports and service facilities. From the study we found that expenditure for disabled persons was very poor. That way, they want to economical help from the Government as well as Non-government organizations.

The chi square test results shows that occupation, Parent's educational level, causes of disability, attitudes of family member, monthly income, monthly expenditure, has statistical significant association with disability. Again for the case of government facilities age, occupation, home types, causes of disability, attitudes of family member, parents education, wants to government service has a significant association with government facilities. Most of the government facilities related variables are significantly associated for both the dependent variables- disability and got government facilities.

Finally, to identify the factors which is believed to affect the disability and hence one government facilities. From the logistic regression analysis, we observed that, in the case of has a disability in the family, age, occupation, causes of disability time at birth, causes of disability, parents education, monthly expenditure for disability and knows government facilities are affected significantly with disability. Again for getting government facilities, occupations, religion, cause of disability time at birth and monthly expenditure for disability are affected significantly with got Government facilities.

### 4. Conclusion

In this study our objective was to concerned on disability at Rajshahi City in Bangladesh, with special reference to social and family behavior toward the disabled persons, the social and demographic status of the disabled, the effect of parent's education, occupation the factors that affect disability and to provide the policies that can be taken to reduce the problems faced by the disabled and to improve the situation of disabled. For this purpose, 150 sampled data were collected from different school and places of Rajshahi city in Bangladesh through direct and indirect interview method. Univariate, bivariate and multivariate technique has been used for analyze the data. Here presents the summary of the study followed by some policy recommendations and conclusion.

Disability has, and will always remain in our society, with the entire social stigma attached to it. But in the backdrop of all these problems, the silver lining is that the government is showing an increasing interest in the

disability sector, and at the same time, a keen interest to work hand in hand with the non-government sector. But to make some real progress in this field in a developing country like Bangladesh, an all-out effort from all quarters is mandatory. Like gender development issues, disability should also be recognized as a crosscutting mainstream development agenda for all. Only then possible collectively bring about positive changes in the lives and livelihoods of the people with disabilities in this country, and any other country in the world. Thus, research on disabilities should receive appropriate attention in the national activities and documents.

Nevertheless, there are some limitations of the study, we hope that the findings of the study would provide useful contribution to policy makers and Government achieve substantial improvement in reducing the burden of disability and other facilities like education, treatment, service and transport etc. should be available.

## 5. Implications and Recommendation

On the basis of the above discussion and the study findings the following policy implications and recommendations could be made.

1. Create awareness and consciousness about family members, neighbors and society regarding the negative attitude towards the disable. This could be done through special information education and visitors and family welfare assistants.
2. More attention should be paid of policy planner and government towards the lower age group. Lower age people are more vulnerable for disable than higher aged group.
3. The Government and policy maker pay more attention on different kind of occupation. Respondent occupation level should be improved by training and other support and create awareness among them regarding disability.
4. Education is the backbone of a nation. An educated parent would make better use of medical facilities for herself and for her children that will contribute to a reduction disability in the society, Community based educational program should be strengthened.
5. Develop the skill of health (Nurse) worker. So that they will capable or level best nursing during pregnancy period of mothers.
6. It is important to know everyone if possible regarding blood groups before marriage.
7. Government facilities should expand specially co-education, service, rehabilitation and transport for disability.
8. Government and policy maker should be more attention for create job opportunity of PWD is their constitutional right as others.
9. Need to move for a comprehensive plan where family, community, state parties, NGOs and other stakeholders will work together for the successful lives of disable persons.

**Abbreviations:** ADD: Association of Disable Development; CDC: Centers for Disease Control and Prevention; ESCAP: Economic and Social Commission for Asia and the Pacific; JICA: Japan International Cooperation Agency; NGO: Non-Government Organization; PWD: Persons with Disable; PGDHRM: Post Graduate Diploma



in Human Resource Management; SPSS: Statistical Package for Social Science; WHO: World Health Organization.

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#### **Competing Interests Statement**

The authors have declared that no competing financial, professional and personal interests exist.

#### **Consent for publication**

The authors declare that they consented to the publication of this study.

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